



ANTIMICROBIAL TECHNOLOGIES FOR THE WARFIGHTER| WarPAD²

OVERVIEW:

Advanced antimicrobial technologies are being developed to provide the warfighter protection from unwanted microorganisms that can affect the health, quality of life and combat effectiveness. Military needs are vastly different than consumer's needs; therefore, several antimicrobial technologies are being explored to meet military specific needs.

DESCRIPTION:

There are a variety of commercial antimicrobial technologies that reduce the presence of bacteria by different mechanisms. Some disrupt the bacteria membrane killing the bacteria while others interfere with the metabolic bacteria function causing the organism destruction. Some of the chemistries being evaluated for application to military items are:

- Triclosan
- Pure silver
- Silver ions
- Silver zeolites (encapsulated)
- Copper oxide
- Chitosan (natural)
- Polyhexamethylene Biguanide (PHMB)
- Quaternary ammonium silanes
- Others

STATUS:

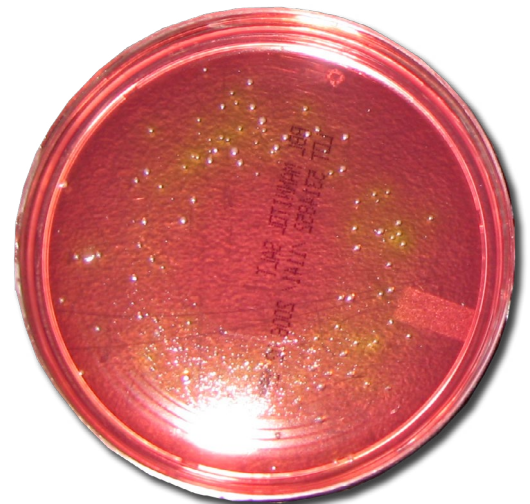
Technologies are being evaluated in the laboratory for their ability to reduce the presence of microbes in accordance with American Association of Textile Chemists and Colorists (AATCC) Test Method 100: Antibacterial Finishes on Textile Materials: Assessment of and AATCC Test Method 30: Antifungal, Assessment on Textile Materials: Mildew and Rot Resistance of Textile Materials. End items are treated with the most promising technologies and evaluated in field wear tests for military performance assessment.

POINT OF CONTACT:

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Treated (top) vs Untreated

UNCLASSIFIED

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TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.